

DRAFT

Jim Bridger Urban Conservation Area

Ten-Year Area Plan
FY 2016-2025



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OVERVIEW

- **Official Area Name:** Jim Bridger Urban Conservation Area, # 8134
- **Year of Initial Acquisition:** 1981
- **Acreage:** 320 acres
- **County:** Jackson
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**
 - A. Strategic Direction**

Manage for wildlife, grassland, woodland, glade and aquatic resources, with an emphasis on grassland and woodland species and compatible recreational and educational opportunities.
 - B. Desired Future Condition**

The desired future condition of Jim Bridger Urban Conservation Area (CA) is healthy woodland, aquatic and grassland communities in a diverse habitat complex.
 - C. Federal Aid Statement**

N/A

GENERAL INFORMATION AND CONDITIONS

- I. Special Considerations**
 - A. Priority Areas:** None
 - B. Natural Areas:** None
- II. Important Natural Features and Resources**
 - A. Species of Conservation Concern:** None observed.
 - B. Caves:** None
 - C. Springs:** None
 - D. Other:** Occurs in the Scarped Osage Plains Jackson County Prairie/Woodland Scarped Plain Landtype Association. This landtype consists of broad gently rolling uplands that give way to limestone valleys with up to 200 feet of local relief. Historically, prairie-covered uplands graded into oak savanna, and then unique woodlands dominated by chinquapin and bur oaks in the scarped areas. Some limestone glades existed historically (Nigh & Schroeder, 2002).

III. Existing Infrastructure

- 2 parking lots
- 0.5 miles easy hiking trail (non-interpretive)
- 2 fishless ponds and dams

IV. Area Restrictions or Limitations

- A. Deed Restrictions or Ownership Considerations:** None
- B. Federal Interest:** Federal funds may be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.
- C. Easements:** None
- D. Cultural Resources Findings:** Yes, records kept with the Missouri Department of Conservation (the Department) Environmental Compliance Specialist. Managers should follow Best Management Practices for Cultural Resources found in the Department Resource Policy Manual.
- E. Hazards and Hazardous Materials:** None observed.
- F. Endangered Species:** None observed.
- G. Boundary Issues:** None

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

- 1) Woodland/forest management: James Bridger Urban CA contains approximately 70 acres of forest and woodland. Management of the area will focus on outdoor recreational opportunities, maintaining riparian corridors to promote stream health and water quality, and limiting invasive species encroachment. Management aimed at increasing the quality of wooded wildlife habitat is extremely limited/nonexistent due to past heavy grazing damage in the area.

The forests/woodlands in the area contain walnut, hackberry, redbud, hedge, green ash, red elm, honeylocust and very few oak trees. The oak species are shingle, chinkapin, northern red, bur and pin. Some of the walnut trees are of very high quality.

The use of fire as a management tool on the wooded portions of this area is very limited. There are not enough oaks in the woodlands to provide sufficient flammable leaf litter; and fine groundcover fuels are nonexistent.

There are a few small degraded limestone glades scattered throughout the woodlands, totaling less than 3 acres. These glades are small and have been invaded by woody vegetation (Figure 4).

- 2) Open land management: Prior to the Department's ownership, the area was heavily grazed and cropped, which allowed an invasive species (Johnson grass) to become established in the area. Prior to having a permittee farmer, the Department covered all costs of eradicating the Johnson grass. Using permittee farmers to produce agricultural crops on 30 acres has helped in the eradication of the Johnson grass. Cropping has also supplemented natural food sources and has provided cover to sustain and attract wildlife, creating better hunting and viewing opportunities for area users. A crop rotation is used, which reverses succession and provides idle areas for ground-nesting birds, food production in weeds (such as foxtail and ragweed) and a host of insects as a food base for a variety of birds (Figure 4).

By using a permittee farmer to eradicate fescue in the fields, warm-season grass and forbs have been planted on 72 acres of the 220 open acres, which provides better species diversity, structure, nesting opportunity and early successional vegetation. The management in recent years, including prescribed burns, mechanical disturbance and herbicide application, has been directed at improving the quality of the grasslands and old fields and suppressing the invading woody vegetation and fescue.

Management Objective 1: Maintain healthy trees and woodlands with management emphasis on outdoor recreational opportunities.

Strategy 1: Monitor forests and woodlands for invasive or exotic vegetation, diseases and insects. Suppress any infestations that may develop.

Strategy 2: Retain and protect existing den trees.

Strategy 3: Retain wooded riparian corridors to promote water quality and stream health.

Management Objective 2: Provide food and cover for wildlife and maintain early successional vegetation.

Strategy 1: Provide crop and idle field rotations for early successional habitat while converting open fields to native plant species to the extent practical.

Strategy 2: Manage prairie plantings and old fields using appropriate methods to maintain early successional habitat.

Strategy 3: Eradicate any known infestations of sericea lespedeza, fescue and Johnson grass. Monitor area for new infestations and other invasive exotic species and eradicate if found.

Strategy 4: Maintain field borders to create edge habitat.

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) The conservation area has a little over 2 miles of ephemeral streams that run through the area. These ephemeral streams are bordered by woodland and grassland communities in the area. The potential for an increased flow regime and erosion through the area could be amplified by development within the watershed (Figure 2).
- 2) The area has two fishless ponds (totaling 1 acre). No other aquatic resources are found on this area. The fishless ponds are primarily used as wildlife watering holes (Figure 2).

Management Objective 1: Monitor the current riparian corridors along the ephemeral creek.

Strategy 1: Monitor and mitigate the current field road and trail use in the riparian corridor along the ephemeral streams.

Strategy 2: Monitor potential development of surrounding property to mitigate erosion and runoff to the area's ephemeral streams.

Management Objective 2: Maintain the two fishless ponds.

Strategy 1: Monitor ponds for invasive exotic species. Suppress any infestations that may develop.

Strategy 2: Provide suitable habitat for amphibians and reptiles in ponds with no fisheries management potential.

Strategy 3: Monitor and facilitate the dam maintenance according to Department maintenance guidelines.

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) The conservation area is open to archery hunting and offers a close-to-home location to hunt deer and turkey for nearby residents. There is a maintained 0.5-mile hiking trail for wildlife viewing.
- 2) The Jackson County Parks Kemper Outdoor Education Center shares a boundary with the conservation area. In the past, Jackson County Parks administered the

area through a lease agreement with the Department. The agreement has expired, reverting management back to the Department. However, Kemper Outdoor Education Center continues to utilize the trails for educational purposes (Figure 1).

- 3) The conservation area is located between two major suburbs. It is surrounded by agricultural land, small farms (5 to 10 acres in size) and housing developments.

Management Objective 1: Provide public hunting and wildlife viewing opportunities.

Strategy 1: Conduct annual management activities that will provide habitat for a diversity of species.

Management Objective 2: Improve educational and interpretive opportunities at the conservation area.

Strategy 1: Communicate recreational opportunities to the general public (e.g., through brochures, the Missouri Atlas database).

Strategy 2: Promote the conservation area to teachers and group leaders (e.g., scout groups and youth groups) as a possible destination for ecology classes, school programs or workshops.

Strategy 3: Work with Kemper Outdoor Education Center on outdoor educational opportunities.

Management Objective 3: Develop and maintain a good working relationship with neighboring landowners.

Strategy 1: Work with neighbors to minimize any boundary, trespass or poaching issues; or restrict other illegal activities from occurring on the conservation area.

Strategy 2: Promote habitat management on neighboring landowner properties.

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Maintain area infrastructure at current levels with two parking lots and 0.5-mile hiking trail.
- 2) Acquisition of land

Management Objective 1: Maintain area infrastructure at current levels.

Strategy 1: Maintain area infrastructure in accordance with Department guidelines.

Lands Proposed for Acquisition:

When available, adjacent land may be considered for acquisition from willing sellers. Tracts that improve area access, provide public-use opportunities, contain unique natural communities and/or species of conservation concern, or meet other Department priorities, as identified in the annual Department land acquisition priorities, may be considered.

MANAGEMENT TIMETABLE

All strategies for this management plan are considered ongoing.

APPENDICES

Area Background:

The Jim Bridger Conservation Area is the largest property within the Kansas City Urban Wild Acres program. The area consists of 320 acres of diverse habitat including old fields, prairie plantings, crop fields, woodlands, glades and streams. The area was administered by lease to the Jackson County Parks Kemper Outdoor Educational Center from 1981-1994.

Current Land and Water Types:

Land/Water Type	Acres	Feet	% of Area
Old field	145		45
Grass plantings	71.5		22
Woodland	70		22
Cropland	30		9
Glade	3		1
Impounded water	0.5		<1
Total	320		100
Ephemeral stream frontage		10,680	

References:

Nigh, T. A., & Schroeder, W. A. (2002). *Atlas of Missouri ecoregions*. Jefferson City, Missouri: Missouri Department of Conservation.

Maps:

Figure 1: Area Map

Figure 2: Aerial Map

Figure 3: Topographic Map

Figure 4: 2015 Vegetation Map

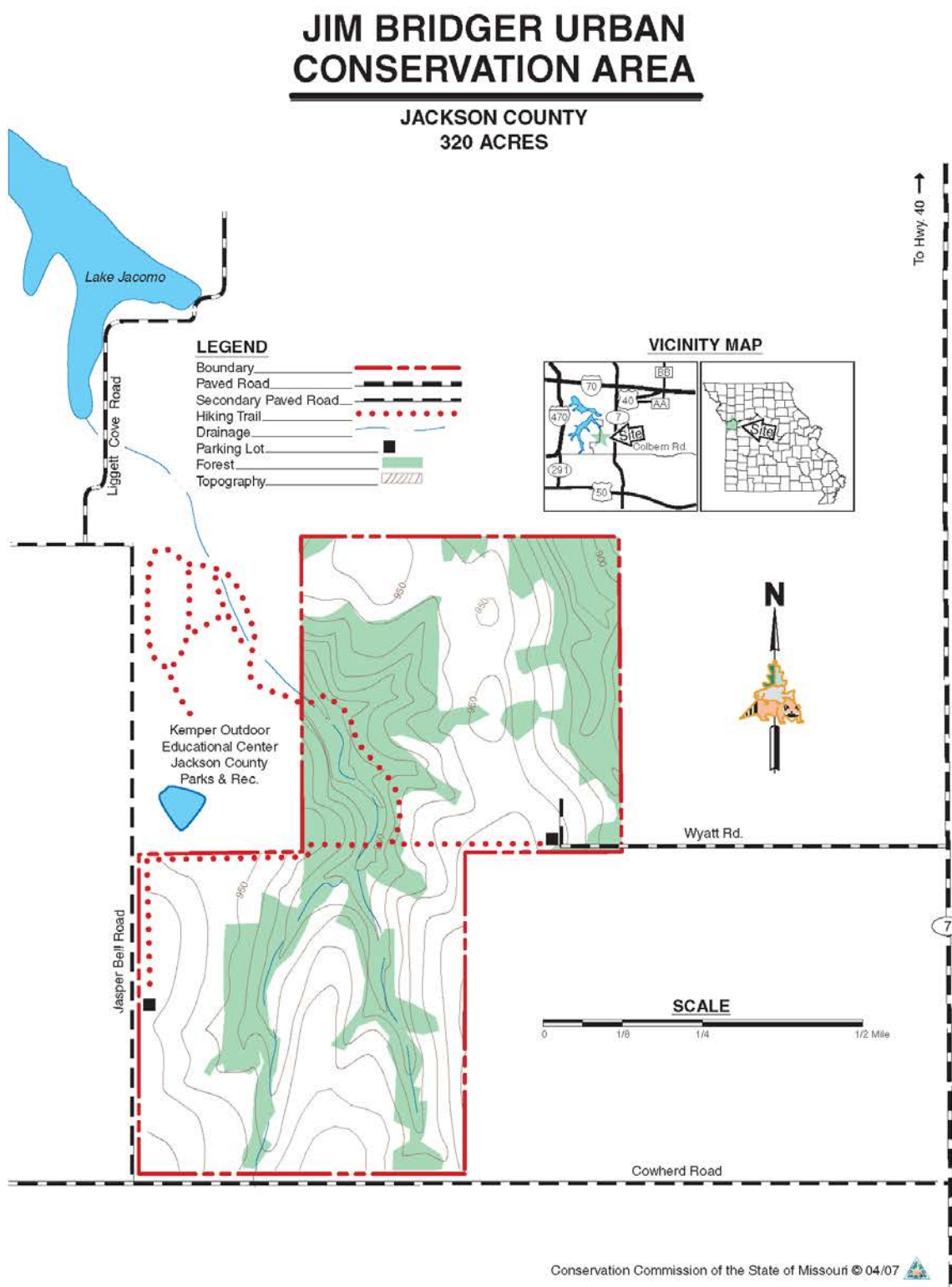


Figure 2: Aerial Map

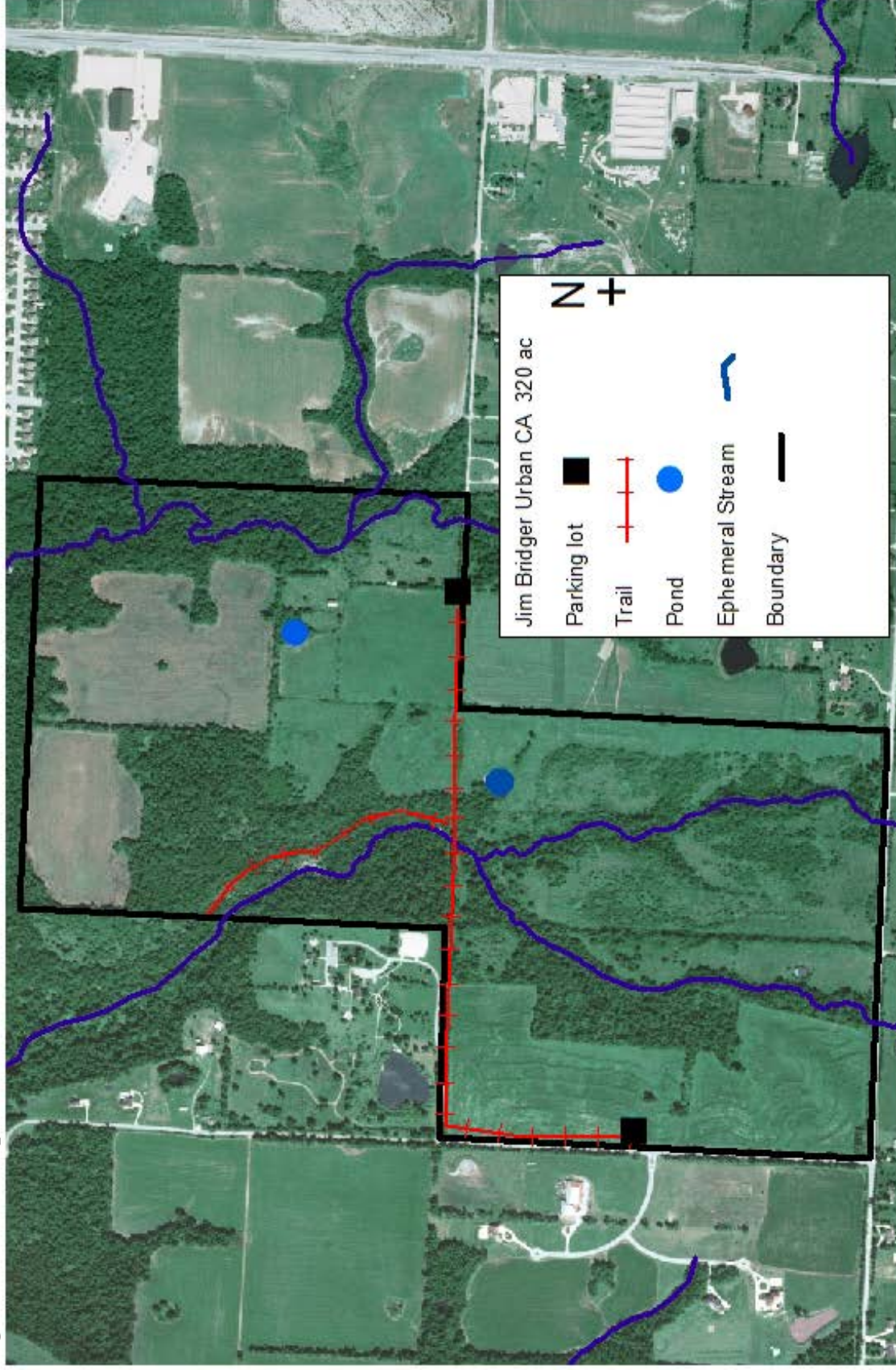


Figure 3: Topographic Map

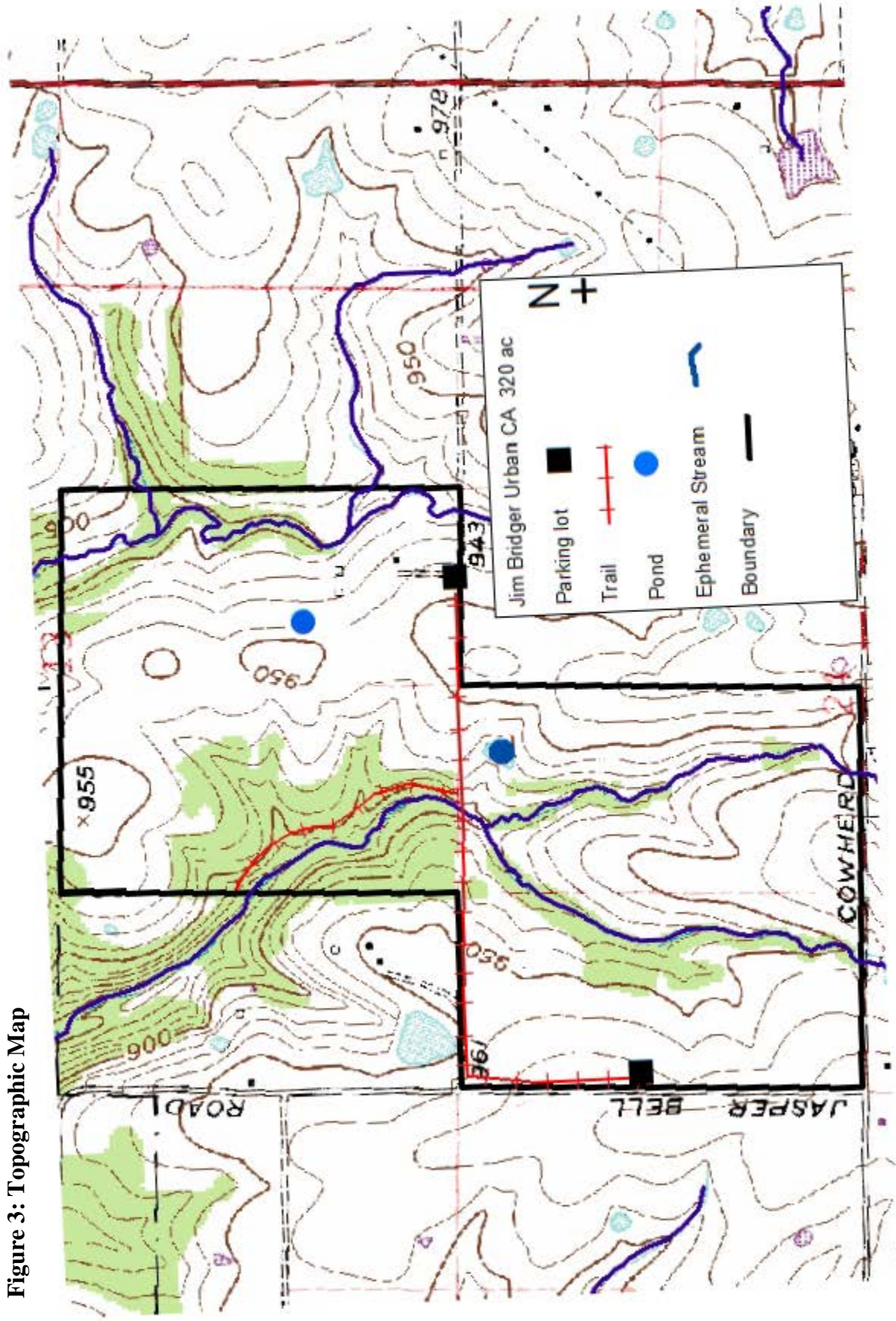
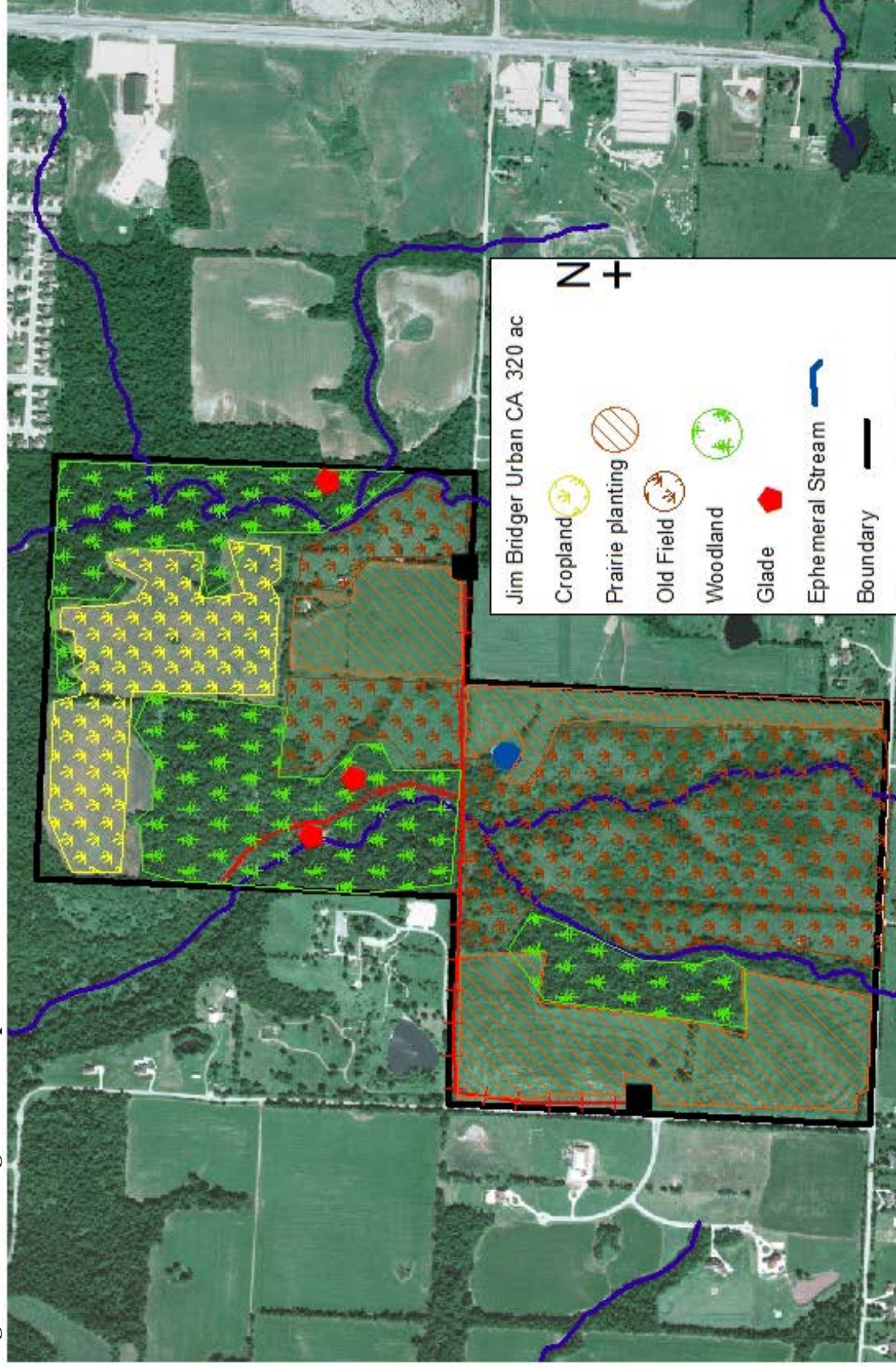


Figure 4: 2015 Vegetation Map



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